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What future for taxation in the EU?
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What future for VAT in the EU? Key challenges and strategies for reform.

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Abstract

In recent years, certain weaknesses of the EU VAT system have become evident. The VAT regime for cross-frontier transactions that was put in place to cope with the abolition of border controls has proved vulnerable to large-scale organised frauds; at the same time, there are concerns that the VAT procedures on international transactions act as a significant impediment to trade, especially for smaller firms. This paper reviews the the broad options for reform and the economic issues they raise.

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1. Introduction

Much has changed since Europe developed and implemented the common VAT system in the 1960s and 1970s. At the time of its introduction, the VAT offered substantial advantages as a common system of indirect taxation to replace the diverse, antiquated and increasingly-arbitrary arrangements for indirect taxation operated by member states. The systematic invoice-based administration of the system, and the arrangements for fractional collection across the value chain offered the prospect of effective enforcement, even when the tax was levied at comparatively high rates. From the point of view of the Community, moreover, the tax had a particularly valuable property: exact tax rebates could be calculated for exported goods and imported goods could be taxed on an equivalent basis to domestic production, ending the risk that member states could exploit these tax adjustments as an alternative form of trade protection.

In recent years, it is clear that the common VAT system has come under significant strain. Some of the problems have had to do with the difficulty of adapting the EU's VAT system to cope with changes in the pattern and organisation of economic activity, such as the growing significance of services in GDP and in international trade, the emergence of more complex, intermediated and globalised relationships between producers, the growing importance of private sector activity in some areas previously almost exclusively the domain of the public sector, and the development of e-commerce. Other problems arose as a result of the abolition of internal frontiers within the EU, which necessitated new procedures for VAT adjustments on trade between EU member states, which have had the effect of increasing VAT compliance costs for traders involved in EU-wide transactions. In addition, the VAT system has become increasingly exposed to revenue losses through systematic fraud and organised crime, which has exploited weaknesses in the system, especially the arrangements for refund of VAT on export, leading to revenue losses which in some member states have been of real macroeconomic significance.

In parallel with these developments, new information technology has transformed the range of options for administration and enforcement. The invoice-based operation of VAT was a streamlined and economical mode of operation in a world where information was costly to collect and disseminate. Traders had to provide the revenue authorities with a limited set of information, most of it useful in the operation of the business as well as to the revenue authorities, and the system thus offered an attractive compromise between enforcement effectiveness and the burden of detailed record-keeping. It is less clear that VAT on the current model makes the best use of the opportunities for efficient administration and effective control which are offered by modern information technology.

This paper looks at the future prospects for VAT in the European Union, in the light of these economic and informational developments.

The principal focus is on the mechanism for VAT adjustment on intra-EU trade. In the run-up to the abolition of intra-EU border controls after 1992, the European Commission proposed that the EU VAT system should shift from zero-rating intra-EU exports to new arrangements which would continue the VAT chain of payment-and-refund across intra-EU borders, supplemented by a Clearing House to ensure that the pattern of member state revenues was left undisturbed. In the event this proposal was not adopted, and member states agreed to retain VAT zero-rating of intra-EU trade as a transitional system, supplemented by some new and – arguably - onerous reporting requirements on intra-EU transactions. This regime has now been in place for more than 20 years, and a number of attempts to establish a more satisfactory and permanent alternative have failed. Currently the European Commission and member states are engaged in a programme of work to identify the future direction of reform, on the basis of a remit agreed by the European Council in May 2012 to "examine in detail the different possible ways to implement the destination principle".

The paper will look at the economic dimension of some of the key issues concerning the future of the EU VAT:

- How far is the existing mechanism for VAT adjustment on intra-EU VAT sustainable in the long-term? Does it provide a durable basis for making the required tax adjustments at an acceptable balance between compliance and compliance costs? Or has the emergence of large-scale VAT carousel fraud in some member states signalled the fundamental weakness of the current regime?

- What alternatives to zero-rating of international trade can be identified, and what are their principal economic strengths and weaknesses? In particular, has the case for extending the VAT chain across intra-EU frontiers been strengthened or weakened by economic developments over the past two decades, including the growth of large-scale VAT fraud, the growth of services trade, and the development of e-commerce?

- How far have recent developments in the use of information technology for internal business management, transaction documentation and payment created a fundamental change in the opportunities for operating and enforcing indirect taxation, that shift the balance of advantage away from the current invoice-based VAT towards alternatives. With the possibility of cheaper and more effective processing and audit of individual transaction data, is the balance of advantage beginning to shift away from VAT-type mechanisms towards single-stage taxes levied at the retail stage, supplemented by the provision of data on intermediate transactions? Does the increasing use of electronic payment processes offer opportunities for a wholesale modernisation of the EU VAT, that would provide greater revenue security, both within member states and on intra-EU transactions?

2. VAT adjustments on international trade

One of the distinctive features of sales taxes such as VAT is the widespread use of provisions to exempt exported goods from taxation, and to ensure that imports are taxed on an equivalent basis to domestic sales. With a VAT the total relief of VAT on exports is achieved - despite the fact that VAT will have been charged at all previous intermediate sales of the good in question - by zero-rating exports, in other words by charging a tax of zero on the export sale, and allowing the seller to recover input VAT. Symmetrically, imports are, in effect, subject to VAT on the full import value. The result is that VAT-registered businesses producing outputs subject to VAT do not gain competitive advantage - or suffer competitive disadvantage - from any difference between the domestic VAT rate and VAT rates in the markets where their customers or competitors are located.

One question that has been discussed extensively in the economics literature is whether there is any economic justification for these tax adjustments. After all, no corresponding adjustments are made for other taxes that might be reflected in the price of traded goods, such as payroll taxes or corporation tax. Instead, these taxes are treated simply as part of the cost of doing business in a particular location.

This literature contrasts taxes levied on two different bases, an origin base, in which traded goods are taxed in the country of production, and a destination base, where the tax is instead levied in the country of consumption. For most taxes and a simple structure of production this distinction is relatively straightforward: is the tax levied where the producer is located, or where the customer is located? For a complex production system involving many intermediate transactions before a product is sold for final consumption, and a multi-stage tax such as VAT, levied on each intermediate transaction, the distinction between origin and destination taxation is far from straightforward, and there has been considerable confusion about terminology and about the significance for VAT policy of results obtained in a more straightforward analytical context.

In discussing this issue, Messere (1994) identified three aspects of the tax treatment of an international transaction that potentially differ depending on how the tax is designed and operated

- Which country's tax rates determine the final tax burden and the total revenue raised from production and sale of a good?
- Which country benefits from the revenues?
- Which country collects the tax?

In the VAT systems such as the current EU regime, where exports are zero-rated and VAT imposed on the full value of imports, the answers to all three questions are the same. The tax rate of the importing country determines the final tax burden on a traded good and the total revenue raised; this revenue accrues to the importing country; and the importing country levies the tax. The international VAT regime operates unambiguously on a destination basis for commercial imports.

Likewise, since the abolition of restrictions on cross-border movements of goods, the EU VAT regime operates on something close to an origin basis for personal imports by individual consumers. A customer from the UK who goes shopping in Paris buys goods which bear the French rate of VAT. It is this rate which determines the revenue which the French government receives from the purchases made by the British shopper in Paris, and the tax is collected (from the French retailers) by the French tax authorities. If the goods had been entirely manufactured within France, then this would correspond precisely to an origin basis tax treatment.

However, it is less straightforward to define how VAT would operate on an origin basis when taxing international transactions in intermediate goods and services ("B2B" sales in current jargon). Under the current regime, if the British shopper buys goods in Paris that had been made in (say) Germany, they will pay French VAT on the entire price, and the good will bear no trace of German VAT (because of the VAT adjustment made by zero-rating the intermediate sale of the good from the German manufacturer to the French retailer). It would be possible to conceive of a VAT system in which different slices of value added were taxed at the rate applicable in the country where the value added took place, but the tax mechanism that will be needed to achieve this is very different to the current one, since it needs to leave some residual trace of each country's VAT in the price of the final product[1].

With most conceivable alternative VAT adjustment mechanisms, Messere's three criteria do not coincide. In particular, there are a range of mechanisms in which the outcome, in terms of the burden of tax on internationally-traded goods, is governed by the tax system of the importing country, but which may involve both the exporting and importing country in the administration of the tax on the trade transaction, and which may allocate part or all of the revenue to the exporting country. These regimes are of interest because their economic properties – in terms of their impact on relative prices of goods produced in different countries and hence the pattern of trade – coincide closely, or in some cases completely, with the economic properties of the current mechanism. The economic literature has generally taken the first of Messere's criteria as the basis for defining the destination basis for VAT, since this makes the terminology for VAT consistent with the economic literature on the economic properties and merits of origin and destination based taxation more generally.

As Aujean (2011) makes clear, the discussion of EU VAT policy has been bedevilled by confusion created by a decision to apply the term "taxation at origin" to a particular proposal – the Commission's proposal of 1987 – which was in fact intended to achieve an equivalent destination-based outcome to the existing regime, through a different practical mechanism, in which goods would be exported bearing the exporting country's VAT, and where full credit for this would be given to the importer by the importing member state's tax authorities. In economic terms this is a destination-based outcome. Nevertheless, as Aujean observes, "this confusion persists today, and very recently both the

[1] One conceivable mechanism for achieving this would have the German revenue authorities levy VAT at the applicable German rate on the export sale of the intermediate good, but then deduct from this an amount of VAT corresponding to the French rate. If the German VAT rate exceeds the French rate, the excess of the German rate over the French rate would then remain embedded in the price of the product in subsequent trades. Other mechanisms can be devised to achieve a similar final outcome. All are complex.

European Commission and the European Parliament have again discussed possible reforms of the VAT system based on the ‘principle of origin’ while in fact what they were discussing was nothing more than a modality of operation of the ‘destination principle’.”

As far as the author is aware, there has been no time, since at least the Single Market programme was formulated in the mid-1980s, at which member states of the EU have agreed to implement VAT on the basis of the origin principle, in the economists’ sense. Nevertheless, the use of terms such as “taxation in the country of origin” has created the impression that this might have been under consideration, and a fair proportion of the policy discussion over the subsequent 20 years has been confused and, at times, at cross purposes.

As a preliminary to the main discussion of this paper, therefore, it is worth briefly recapitulating the economic arguments relating to the relative merits of destination-based and origin-based commodity taxation. A focus of this literature has been the specification of conditions under which an origin and destination principles would be equivalent in the sense that they would lead to exactly the same patterns of trade and economic welfare (Lockwood, de Meza and Myles, 1994). The basic intuition is that a devaluation can fully offset the effect of a switch between the origin base and the destination base, so long each country taxes all goods at a uniform proportional rate, even though this rate may differ between countries. Despite the fact, therefore, that an origin base for taxation would appear to disadvantage producers located in high-tax countries, since their exports would bear higher tax than the exports of competitors, the economic outcomes are invariant to the choice of base. Recent work has demonstrated that this equivalence holds in a wide range of models. The main circumstances where the two tax bases would not be equivalent are (i) where non-uniform taxes are levied; (ii) the case of partial application (the “restricted origin principle”, a case of very little relevance to VAT); (iii) effects arising from the inter-generational redistribution when we switch from taxing production to consumption, and (iv) effects arising from the different incentives they give countries for tax-setting and tax competition.

Even though there may be less of economic substance to choose between the two bases for taxation than is often supposed, the policy choice seems clear-cut. An origin based system would appear to be inequitable in its treatment of firms located in countries with different tax rates, and more likely to distort business purchases than under the ‘level playing field' provided by the destination principle Cnossen and Shoup

(1987). Add to this the practical complexity of concocting a tax outcome corresponding to the origin principle with VAT, and it is clear that this is not an issue that needs to detain us much longer. All of the alternative mechanisms that will be discussed in the remainder of this paper are consistent with achieving a destination-principle outcome in the economic sense: in other words, achieving an outcome in which the tax rate of the country of consumption (or, strictly, the country of final sale) determines the burden of tax on the product and the revenues collected.

Nevertheless it is worth noting one legacy of the confusion over the meaning of “taxation in the country of origin”. There appears to be a widespread – and wholly mistaken – view that most alternative mechanisms for VAT adjustment on intra-EU trade require the approximation or harmonisation of member state VAT rates. In part, this misunderstanding appears to be based on the conditions required for an origin-based tax, *in the economic sense*, to achieve the same economic outcome as a destination-based tax. These conditions are, indeed, moderately stringent. But they are wholly irrelevant to the need for rate approximation in moving to any of the alternative tax adjustment mechanisms for achieving an outcome consistent with the destination principle, including those in which taxes might initially be levied by the exporting member state.

3. Reform criteria

What properties, in principle, would one want the EU VAT system to exhibit?

Firstly, it needs to respect the economic and political context within which it must operate:

- The EU does not have border controls on the movement of goods between member states. These were abolished as part of the “1992” programme which aimed to create a single, frontier-free, internal market. The removal of border controls was an important symbol. But it was also intended to eliminate the real economic costs associated with frontier formalities, and to remove the risk that these formalities could be employed as a barrier to trade.

- VAT is entirely assigned to, and administered by, member states.

•	Member states set a variety of standard VAT rates, currently ranging from 15 to 25 per cent.

Then, any reform needs to balance requirements concerning operating costs for the authorities and taxpayers, revenue-raising effectiveness, national budgetary impacts, and the prevention of fraud and evasion. In its recent work with the “Group on the Future of the VAT” the Commission has set out the following four criteria to govern the choice of options:

- *Equality and simplicity – Domestic and intra-EU transactions should be treated the same so that doing business across the EU becomes as simple (reducing compliance costs) and as safe (providing legal certainty) as engaging in purely domestic activities, in particular for SMEs. Rules should not be an obstacle to the proper functioning of the single market.*

- *Budgetary impact – VAT revenues should be allocated to the Member State of the final consumption of the goods in accordance with its conditions and in compliance with the national VAT rate autonomy. The impact on the cashflow of business should be similar to that for domestic transactions to ensure a genuine level playing field.*

- *Ease of administration and cost of collection – An increase in the administrative burden for the tax administrations and business should be avoided in order to allow that the cost of collecting tax revenues is similar to that for domestic transactions.*

- *Prevention of fraud and abuse – Breaks in the VAT chain within the single market should be avoided to the extent possible to ensure that the VAT system remains robust and fraud-proof.*

The emphasis on ensuring that the costs for firms should be equalised between domestic and intra-EU transactions has been a distinctive and important feature of the European approach to these issues. Essentially it is a requirement for ‘compliance cost symmetry’, in the sense that VAT compliance costs on intra-EU trades should be similar to VAT compliance costs on corresponding domestic supply. The reason for this is linked to the underlying goal of promoting the single European market. The beneficial, trade-creating effects of the abolition of VAT formalities at frontiers should not be undermined by the imposition of equally-onerous formalities on traded goods away from the frontier.

In addition to the criteria proposed by the Commission, it might be worth adding a further criterion relating to the incentives that the mechanism establishes for member state behaviour in respect of both tax rates and enforcement. The system should not establish undesirable rate-setting incentives for member states, and the tax authorities required to operate the system should face appropriate incentives to devote resources to enforcement.

Finally, it is clear that to have any hope of securing political agreement any reform should not restrict member states' autonomy in setting tax rates.

No system can perfectly satisfy all of the above requirements, and tradeoffs will be inevitable. What is crucial is the point at which they are made, and the weighting which is then given to different objectives where they cannot all be met.

4. Problems with the current VAT adjustment mechanism

There are good reasons to want to retain the destination principle (in the economic sense) as the underlying basis for the VAT treatment of international trade. However, the current mechanism by which this economic outcome is achieved, export zero-rating, has two significant drawbacks.

One, which has received a lot of attention in the past decade, is that export zero-rating creates problems for VAT enforcement. It breaks the chain of VAT revenue cumulation whenever the chain of production and distribution crosses national boundaries, a point of particular enforcement vulnerability. Goods supposedly exported, and therefore zero-rated, may be diverted to the domestic market bearing no tax. Even more seriously, the refund of VAT to exporters coupled with the deferred payment of VAT on imports gives scope for profitable criminal exploitation through large-scale 'carousel frauds' and other similar schemes (Keen and Smith, 2007).

The second drawback of export zero-rating, highlighted in the European Commission's 1987 proposals for an alternative VAT mechanism to accompany the elimination of intra-EU border formalities at the end of 1992, is the sharp contrast between VAT procedures applied to domestic sales and exports when exports are zero-rated. As a consequence, VAT compliance costs to business—the form filling burden and other administrative costs which businesses incur as a result of the operation of the tax system--may differ between domestic sales and exports. These differences in compliance costs, if severe enough, have the potential to distort the patterns of economic activity and trade. Moreover, there are real concerns that the growing gap between the VAT procedures applied domestically and on international transactions, especially in response to the risk of fraud on intra-EU trade, has increased the relative VAT compliance cost burden associated with intra-EU trade.

How serious is this? Evidence on the scale of differential compliance costs is hard to gather, and there is no hard evidence on their adverse effects on European economic integration. The 1996 Commission 'definitive regime' proposals stated that “according to some estimates, the average costs [of transactions between member states] can be five or six times greater than those of a domestic transaction”. These estimates are now somewhat dated, as they pre-date many IT developments, the accession of new member states, and a sequence of changes designed to reduce the risks of revenue losses through fraud. However, they do give a feel for possible orders of magnitude. It should be added that the differential is likely to be much higher for small firms than for large ones. VAT compliance costs undoubtedly account for a significant part – though far from all – of the differential costs of trading with other member states rather than domestically.

Compliance costs can have both transaction related (‘variable’) and ‘fixed’ (or ‘entry’) components. Both of these may, potentially, distort the patterns of activity and trade.

To the extent that the procedures applying to trade between member states involve higher compliance costs on each transaction than on corresponding transactions within a single member state, the tax system may discourage complete integration of the European market, by disadvantaging cross-frontier suppliers compared with domestic firms.

VAT compliance costs associated with first-time exporting – such as the initial costs of training and tax advice which an exporter must bear before being able to enter a new market - could potentially have a more drastic effect on industrial structure, in that they could segment the European market by discouraging entry by firms into export markets in other member states. Such costs could inhibit the entry of new firms into exporting in general, or into entering a new market, and may be particularly damaging in the case of smaller firms seeking to make the transition from a business orientated purely to the domestic market to one trading throughout Europe. They could thus distort both the pattern of trade, and the size structure of industry, by favouring larger firms, for whom the fixed compliance cost burden is a smaller proportion of total costs.

It is important to note that the origin of ‘entry’ compliance costs – and the problems they create – stem as much from uncertainty and the costs of ascertaining obligations as from actually filling in paperwork. Accordingly, the scale of these costs cannot be measured by the standard methods used to quantify compliance costs, in which a sample of businesses are asked to assess the amount of time that would be spent undertaking certain specified tax procedures. In the case of fixed compliance costs incurred by first-time exporters, the main barrier is that they simply do not know what will be involved, and this uncertainty may well be enough to act as a significant impediment to exporting.

Some suggestive indication that small firms may face significant obstacles to trading in other member states is given by the very much lower rates of participation in trade by small firms: most intra-EU trade is conducted by large firms. The data on trading activity by firm size for Germany illustrate the scale of the disparity in trading activity (Table 1). Fewer than 5% of firms in the two smallest size classes are engaged in any exporting at all, compared with 11 per cent of firms overall, and more than 40% of firms with an annual turnover in excess of €1 million. The export turnover of the 1.5 million firms in the two smallest size classes is of almost trivial economic significance, less than 0.1% of all exports. Nevertheless, those small firms that do participate in exporting have quite substantial levels of exports in relation to their turnover - more than 20% of turnover in the lowest two size classes, a higher percentage than in medium-sized firms, and broadly equal to the export share for exporting firms as a whole.

Of course, there are good reasons why many small firms are not engaged in exporting. These figures will include retailers, bars, plumbers, taxi operators, and many other businesses which have a natural focus on a small local area, and which we would not expect to see engaged in exporting. So much further analysis would be needed of the nature of firms and the pattern of exporting before anything approaching a conclusive demonstration could be made that trade was inhibited by cost barriers to exporting. Even then, tax compliance costs may be only one of a number of entry cost barriers faced by first-time exporters: other entry costs may arise from unfamiliarity with markets, legal requirements, the fixed cost of a local presence, and so on. This is an area where further work is urgently needed, to underpin any selection of VAT reform priorities.

Table 1
Firm size and exporting, Germany, 2009

Size class (in 1000 EURs)	Number of firms (1000s)	Turnover (bn EUR)	% of firms which export	Exports as % of turnover	Exports as % of turnover, exporters only
17.5 - 50	912	29	2.7	0.7	24.5
50 - 100	635	46	4.7	1.0	20.0
100 - 250	685	109	8.2	1.4	16.6
250 - 500	351	124	14.3	2.2	14.6
500 - 1000	232	163	21.9	3.2	14.2
1000 - 2000	143	201	30.9	4.7	15.0
2000 - 5000	99	305	43.3	7.6	17.0
5000 - 10000	37	255	56.2	11.3	19.8
10000 - 25000	24	365	65.3	14.2	21.5
25000 - 50000	9	307	73.2	17.4	23.7
50000+	10	2994	78.8	21.6	25.1
All firms	3135	4898	11.1	16.8	23.9

Source: IfM Bonn, based on Statistisches Bundesamt, Umsatzsteuerstatistik 2009

Some indication of the importance of VAT compliance costs in inhibiting trade has also been gathered from surveys of business opinion. For example, the UK's Office of Tax Simplification recently investigated the scope for simplifying the taxation of small businesses, and concluded that international trade is a major source of complexity facing them: "It has traditionally been assumed that only large businesses carry out international trade and so find themselves liable to register for VAT in other countries; this is clearly not the case from our research" (Office of Tax Simplification, 2011).

5. Options for reform

Two straightforward alternatives to export zero rating, both consistent with the destination principle, are:

• "Exporter rating" – meaning that exported goods bear the same VAT rate as domestic sales in the exporting country. This system was proposed by the European Commission in 1987. As far as the exporting country is concerned, the system exhibits compliance symmetry, because exactly the same VAT treatment is applied to sales between EU countries as to sales within a single member state.

- "Uniform rating" - all member states charge a uniform, but non-zero, rate of VAT on exported goods, set by the Community, which may differ from the rates of VAT on domestic sales, set by member states. This system does not give compliance cost neutrality since exporters are required to follow different procedures from those used for domestic sales. However, if the uniform rate is sufficiently high, it is likely to involve less onerous compliance costs than export zero rating (conceptually equivalent to uniform rating, at a uniform rate of zero), since the reduced incentive for diversion fraud on goods subject to the export taxation regime will mean that the authorities will not need to scrutinise claims for the export tax regime with such rigour.

Note that all systems—like these—in which VAT is borne on export, and credited on import, potentially redistribute revenues between member states if operated at a decentralised level as compared with a starting position in which trades are subject to export zero-rating. The jurisdiction that collects the additional tax on exports does not give the corresponding VAT credit on imports. And although all jurisdictions will collect some additional taxes on export, and give credit for taxes paid on import, these amounts are unlikely to be equal. Countries with a trade surplus with other member states in goods subject to VAT will tend to gain VAT revenue compared with export zero-rating, and vice versa for countries with trade deficits. The revenue distribution will be further complicated in the exporter rating case by the fact that the tax charged on exports will vary between member states. Countries with above-average VAT rates will tend to gain revenue, even with balanced trade, because they will give credit for import VAT at a lower rate of tax, on average, than that charged on exports.

This change in the allocation of VAT revenues between member states poses a significant political obstacle to implementing either of the above regimes without some additional arrangements to restore the original revenue distribution. The Commission's 1987 proposals envisaged a periodic "clearing" of revenues, based on member state net positions; member states would be required to report the VAT collected on exports and the VAT credit given on imports, and periodic financial transfers would be made by an EU "Clearing House", to eliminate the revenue gains and losses. The uncomfortable feature of such an arrangement, however, is that it would have eliminated the incentive for member states to devote resources to preventing "invoice mill" frauds, in which traders use false invoices from abroad to claim credit for non-existent VAT on non-existent imported inputs. Such frauds would be one of the weakest links of a VAT system in which importers claim credit for VAT on imported inputs; the member states giving the credit cannot so easily check the supplier's books as when the supplier is a domestic firm. Yet, through the clearing house, the Community as a whole would underwrite the cost of giving VAT credit on imports, and this would undermine the incentive for member states to devote resources themselves to this key aspect of enforcement.

For this reason, it may be desirable to think of arrangements that attempt to achieve the required redistribution of revenues, without undermining the incentive, at the margin, for member states to devote resources to VAT enforcement. Various possibilities could be envisaged, in which the amount of credit from the clearing house would not be increased, Euro for Euro, with the amount of VAT credited on imports. The simplest solutions involve lump sum transfers, based on ex ante estimates of revenue gains and losses, leaving member states to retain the benefit of any yield from better VAT enforcement.

Do either of these systems—exporter or uniform rating—require any restriction on member states' ability to determine revenue-relevant rates of VAT? At first sight, it would appear not. In each case, what is at stake is the rate of VAT on traded intermediate goods - and VAT on intermediate goods is irrelevant to the final revenue yield. However, looking more closely, we suggest that there would be a need to limit member states' VAT rates under exporter rating with lump-sum revenue clearing. When revenue clearing takes a lump sum form (or when countries give credit for VAT paid elsewhere, without any clearing at all), countries could increase their share of the total VAT revenues by increasing their VAT rates. There would be no competitive penalty to pay, because the countries to which they export would give full credit for the higher VAT. The only restraint on this process would be the willingness of domestic consumers to accept the higher tax rates that would also have to be charged on domestic sales. But for a comparatively small country, there would be a significant gain from raising tax rates on exportables. Exporter rating, combined with lump-sum clearing of the revenue redistribution, is therefore unlikely to be acceptable without some restriction on member states' commodity tax rates. No such problem arises with the uniform rating regime.

Uniform-rating, however, perpetuates one of the problems which characterises the existing VAT regime for transactions between EU member states, which is that such transactions are subject to a regime which is qualitatively different from the VAT regime applying to transactions within a member state. At the very least, traders have to learn how to deal with an unfamiliar external regime when they start exporting for the first time, and this may be a substantial impediment to international business engagement by small firms. It is possible that the uniform rating regime would not need to be accompanied by such onerous compliance requirements as are employed to prevent diversion fraud under the zero-rating regime, since the incentive for diversion fraud will be significantly smaller, but there remains the risk that any different regime applying to international transactions will begin to diverge from the domestic mode of operation, and will begin to acquire additional costs in operation as well as the fixed costs of first-time trading.

Compliance symmetry between domestic and external transactions is important for a further reason. Some key changes in the economy, such as the rise of internationalised business organisation and the rapid expansion of internationally-traded services and e-commerce, have made the VAT regime developed in the 1960s seem anachronistic. Basing taxation on a model which seeks to define the location of a transaction has become increasingly difficult, and a tax system which places great weight on a distinction between domestic and international trades is increasingly at odds with the internationalised nature of economic activity. The removal of internal border controls in the EU has created problems for the effective monitoring and enforcement of the VAT regime, but these are even more evident when we consider trade in services, for which border controls are in any event an irrelevance - there was never any prospect of intercepting legal or financial advice, for example, at a border check – and very similar problems are now evident in the taxation of e-commerce. Of course, it is possible to devise ad hoc solutions for each of these issues, and indeed this has been the route which has been taken. But the result is a patchwork of unsystematic solutions to individual problems, which complicates rather than simplifies the tax aspects of cross-frontier trade. In this context, achieving compliance symmetry is important because it provides the basis for a regime which does not depend on increasingly-outdated and meaningless material notions of geography and physical location.

The VIVAT mechanism proposed in Keen and Smith (1996) effectively builds on the notion of a uniform EU-wide rate of tax for cross-frontier business-to-business transactions, but takes the further step of applying this rate to all business-to-business transactions within the EU. Countries would retain the right to impose their own rate of VAT on sales to final consumers, and since these are the tax rates which govern VAT revenues, there would be no diminution of member state fiscal sovereignty. The most significant drawback of this mechanism is that it would reintroduce an end-user distinction into VAT, because goods and services would be taxed differently depending on whether the sale is to another business or to a final consumer. Such end-user distinctions cause problems in the administration of retail sales taxes, especially in enforcing high rates of sales tax on businesses that sell to both business and retail customers. If the tax rate is high, the gain from misclassifying retail sales as B2B sales is correspondingly large; for this reason, there seems to be some conventional folk wisdom among policy-makers in the US that RST rates in excess of about 10 per cent would incur excessive levels of evasion. However, while VIVAT makes an end-user distinction, it applies to the difference between the EU-wide intermediate goods rate (perhaps 15 per cent) and the rate applied to final goods sales (a maximum of 25 per cent at present). Moreover, it would be relatively easy to devise electronic forms of customer identification (as in the VIES system) which could eliminate most if not all of the risk of misclassification.

VIVAT certainly has drawbacks (Keen and Smith (1999): none of the possible approaches to the taxation of cross-frontier transactions within the EU is without problems. However, it offers the prospect of less revenue vulnerability than the current zero-rating regime, it would achieve symmetry in compliance costs, and it is less dependent on notions of geographical place and material location than alternative regimes.

6. Conclusions

There are a range of options for reform of the VAT treatment of intra-EU trade that could result in outcomes that are consistent with the destination principle. The current regime zero-rates intra-EU exports. This break in the cumulative VAT chain exposes the EU VAT system to the risk of significant revenue loss through various forms of evasion and fraud, including the diversion into the shadow economy of goods which have been zero-rated for supposed export, and also large-scale criminal frauds such as the carousel frauds which have attracted much attention in the past decade. The measures which have been taken to counter the various risks of fraud and abuse of the intra-EU VAT mechanism mean that firms engaged in intra-EU trade encounter a VAT regime which is unfamiliar from their experience of domestic VAT, and - arguably – high compliance costs. Far from promoting economic integration within the EU, there is a real risk that the net effect of the measures which have been taken to eliminate fiscal border controls between EU member states is to prevent the realisation of significant potential gains within the internal market. In particular there is a risk that small firms have been differentially deterred from exporting.

One possible direction for reform extends still further the measures taken to ensure that zero-rating intra-EU transactions does not lead to excessive revenue loss. However, there is a danger that this adds still further to the compliance costs which firms face when trading outside their domestic market.

Another direction involves alternative mechanisms for VAT adjustment, in which the risk of diversion fraud is reduced by charging VAT on intra-EU exports. A number of mechanisms of this sort are available which would be consistent with a destination-principle outcome, in terms of tax rates, burden and revenues, and which would not require restrictions on the VAT rates that member states levy.

This paper has suggested that greater weight should be accorded to symmetry in compliance costs between domestic and intra-EU transactions, in order to avoid the VAT system acting as a brake on realising the potential gains from economic integration. In particular, common VAT procedures for domestic and intra-EU trades would help to reduce the extent to which first-time exporters face fiscal barriers arising from the uncertainty and cost of compliance with unfamiliar VAT procedures.

The VIVAT mechanism (Keen and Smith 1996), in which all intermediate goods transactions (B2B trades), both domestic and intra-EU, would be subject to VAT at a standard EU-wide rate - perhaps 15% - provides one way in which common processes could be applied to domestic and intra-EU trades without disturbing the autonomy of member states in revenue-raising. In addition, it places less reliance in operation on definitions of geographical location, and in the longer term therefore may also provide the basis for a systematic modernisation of the VAT treatment of trade in services and e-commerce.

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